

SUPPLYING THE WAR MACHINE

Pentagon's intricate 10,000-mile pipeline keeps fighting forces equipped and fed

By James W. Crawley
STAFF WRITER

Kandahar International Airport, where Marines from Camp Pendleton and Miramar Marine Corps Air Station are encamped, is at the end of a 10,000-mile supply pipeline stretching from San Diego to Afghanistan.

Nearly everything the Marines need, except sand for their sandbags, must be brought in.

Bullets, mortar rounds, rations and fuel, along with thousands of other items, are carried to the war region via a caravan of supply ships, tankers, cargo jumbo jets, small carrier-based transport planes, helicopters, trucks, Humvees and, finally, on infantrymen's

backs.

Without this supply line, the Pentagon could not fight the war.

"Amateurs talk strategy, generals talk logistics," said John Coyle, an emeritus professor of business logistics at Penn State University. "When you're fighting a war at some distance, the importance of logistics increases at a geometric rate as the distance increases."

History is replete with wars and battles lost because war-fighting materiel was unavailable or in short supply, he said.

Afghanistan's past is a prime example. Both the British and the Soviets were forced to retreat, in part, because Afghan forces were able to hinder supply shipments.

SEE Supplies, A5



A sailor on the supply ship Niagara Falls in the Arabian Sea attached a load of cargo to a helicopter bound for the amphibious assault ship Peleliu. *Earnie Grafton / Union-Tribune*

SUPPLIES

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Larger support system has been trend since WWII

In fact, military logistics are so important that officials refuse to discuss too many details.

The only statistics the U.S. Transportation Command would release is that Air Force jets have dropped more than 2.4 million humanitarian ration bags to Afghan residents, delivered 43,761 tons of supplies and flown more than 22,500 personnel to support Operation Enduring Freedom.

Further information, U.S. officials argue, could help enemies locate supply bases or anticipate future actions.

But residents of Bahrain, a small island nation in the Persian Gulf and the headquarters for the U.S. 5th Fleet, can clearly see the arrivals and departures of heavily laden Air Force cargo jets, along with dozens of chartered jumbo air freighters and passenger jets. That scene is repeated daily at air bases in Oman, United Arab Emirates, Kuwait, Diego Garcia and Uzbekistan.

Several logistics experts said no other nation could keep large numbers of troops and sailors supplied at sea and in a landlocked country on the opposite side of the world like the United States. No one else has the combination of technical know-how, experience and enough ships and aircraft, they said.

Operation Enduring Freedom has the longest supply lines of any war since World War II. While cargo jets can fly from the United States to the region in about 18 hours, it takes supply ships up to four weeks.

The Pentagon's logistics system has changed since Desert Storm nearly 11 years ago. Then, six months were spent turning Saudi Arabia into a garrison supply base with bombs, bullets, food and equipment.

Then the war was over in a matter of weeks, leaving most of the supplies unused. "These days, the Pentagon has adopted business techniques used by FedEx, Wal-Mart and Dell Computers," said Capt. Martin Brown, Pacific surface force supply chief.

Thanks to better computer tracking systems, supply officers can monitor parts and goods from San Diego to Timbuktu; commercial overnight package services are used for time-critical supplies; and large stockpiles have been replaced by "just-in-time" shipments, which only ship the required supplies.

Half of the Navy's high-priority repair parts are now shipped via FedEx or DHL, said Capt.

Brian Cragin, Union-Tribune

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The new supply tactics should work well in the current unconventional war, said Stephen Ferris, a University of Missouri business professor who studies logistics and serves as a naval reserve cargo officer.

The supply needs so far have been modest because the United States isn't using a large force on the ground, he said.

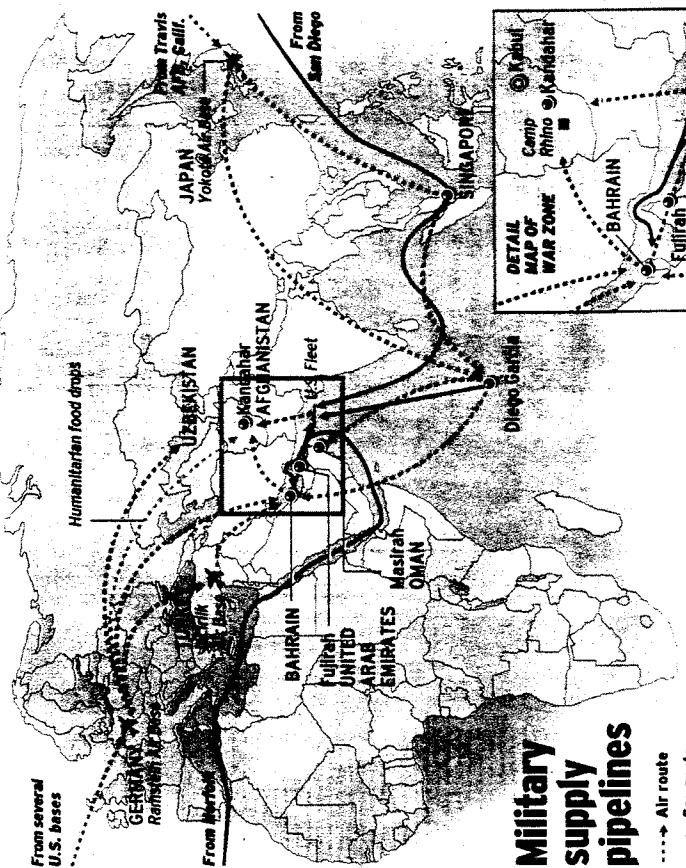
Aircraft carriers brought bombs with them and have received new ones regularly. The Marines from the San Diego-based Peleliu ready group are using the ammunition they brought along. Much of the Air Force bombing has been long range bombers flying from the United States or the island of Diego Garcia in the Indian Ocean, where bombs have been stockpiled for years.

With the exception of one ship, permanently anchored at Diego Garcia and loaded with Air Force bombs, the Pentagon apparently hasn't utilized its pre-positioned supply ships or activated logistics vessels based in the United States.

"There are a lot of teeth and very little tail in this," Ferris said, referring to the so-called "tooth-to-tail" ratio between an army's combat forces — the tooth — and its support personnel — the tail.

The biggest challenge is finding that unique part and getting it shipped here rapidly," Anderson said.

Before the war, most U.S. warships were concentrated in the constricted waters of the Persian Gulf and could be easily



Military supply pipelines

SOURCES: Defense Department; GlobalSecurity.org
BRIAN CRAGIN / Union-Tribune

Since World War II, the trend has been smaller combat forces with an increasingly larger support system.

The Marines of the 15th Marine Expeditionary Unit — the Camp Pendleton unit that sent more than 1,000 troops via helicopter and transport jets into Afghanistan — is largely self-sufficient for 30 days of combat.

All the food, ammo and other supplies were already pre-loaded aboard the amphibious ships Peleliu, Constock and Dubique. If the Marines need more, support ships in Diego Garcia could steam to the war zone in five days to offload more supplies.

But that doesn't mean the sailors and Marines aren't getting more supplies.

The Peleliu and all other ships in the war zone are being resupplied about every 10 days to two weeks with food, sodas,

pallets loaded with milk, and 49 pallets bearing fresh fruit and vegetables.

With nearly every store room filled, Lt. Cmdr. Mike Anderson, the assistant supply officer, said the ship had 67 days' worth of frozen food, canned and boxed food for 78 days, 59 days' worth of eggs and milk for 63 days.

During a recent replenishment, the supply ship Niagara Falls pulled alongside the Peleliu for several hours as two helicopters shuttled between the two vessels, hauling pallets of supplies wrapped in cargo netting.

In 5½ hours, the helicopters moved 281 pallets onto the Peleliu's flight deck, then the pallets were moved down to the hangar deck where about 150 crew members unloaded them and stored the contents throughout the ship.

Most of the load was food — 133 pallets of frozen food, including steaks, ground meat, chicken and ice cream, seven

carrier groups — 36 ships

— in the region simultaneously.

Without a war, the region's supply ships would serve only

one carrier group and one amphibious squadron — 12 to 15 ships.

The most urgently needed parts and people are flown to ships via twin-engined cargo planes, called CODs for Carrier On-Board Delivery, and heli-

copters. The CODs handle the

carrier-to-carrier leg, while heli-

copters carry supplies from the

carrier to smaller ships and

from amphibious ships to shore-based Marines.

But the planes are getting

old. Many are 20 years old, the

youngest is 11.

Since the air war started Oct.

7, dozens of COD flights have

been canceled or delayed be-

cause of mechanical break-

downs. Although U.S. Central

Command officials won't dis-

cuss the situation, those fami-

liar with the squadrons ac-

knowledge that long flights and

heavy use are straining the air-

craft.

The experts say there's no

margin for a logistical mistake;

"If you miss a shipment in

business, you'll get a 'stock out'

and have an empty shelf. In the

military, if you have a 'stock out,' you get someone killed."

Coyle said.